Business News

EPI MBE system earmarked for mm-wave device research

EPI MBE Products Group has delivered a single-wafer 'Gen II' molecular beam epitaxy (MBE) system to the Device Group at the Communications Research Laboratory of the Nippon Ministry of Posts and Telecommunications in Japan. The system will be used for a variety of research projects including mm-wave and electro-optic (EO) communication device technology.

EPI, based in Saint Paul, Minnesota, USA, says that the Gen II system was completely installed and functional within five days of delivery. It says the first AlGaAs/GaAs MODFET heterostructure was grown within a week of loading the source materials.

Another recent sale for the company was a dual chamber 'Mod Gen II' to the US Army Research Laboratory in Adelphi, Maryland, adding to its complement of these machines. One will be used for antimonide growth for HF transistors, micro- and mm-wave devices and the other for the development of lasers, modulators and QWIR detectors.

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Device News

Samsung low noise amplifier available in volume

SAMSUNG Microwave Semiconductor based in Milpitas, California, USA, is now mass producing a high performance, low-noise amplifier (LNA), the 'SM-515101'.

The company says the radio frequency IC (RFIC) is a low-noise, high-gain, high-intercept, low-input VSWR amplifier designed to operate over the 2.1 to 2.7 GHz frequency range. When system linearity requirements are stringent, the company, formerly Harris Microwave, says the SM-515101 is suitable for the first- or second-stage amplifiers in spread spectrum receivers such as wireless local loops, wireless LAN, wireless cable, PCMCIA or Part 15 systems.

According to Samsung, a typical noise figure of 1.4 dB, associated gain of 23 dB, output third order intercept point of +20 dBm, and a reverse isolation of 45 dB can be simultaneously achieved over the frequency range of 2.1 to 2.7 GHz. The SMS-515101 is designed to operate from a single supply voltage range of +3.6 to 5.0 V, and is supplied in an 8-lead SOIC package. It is available for US$2.93 in quantities of 10 000.

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Company News

Freiberger opens US$38 million gallium arsenide wafer facility

FREIBERGER Compound Materials GmbH (FCM) has officially opened its new US$38 million (DM65 million) production facility in Freiberg, Germany.

The factory, the largest industrial gallium arsenide (GaAs) wafers facility in Europe, has been planned, built and put into operation in less than two years.

The plant includes a production and an administration complex. It has a total floor space of 6500 m^2 of which 1850 m^2 represents clean room areas of different categories. The production areas include crystal growing, mechanical processing, etching, polishing and final cleaning/wafer inspection. The facility, which employs 118 people, features state-of-the-art equipment that includes units for media supply and air treatment.

Freiberger has its roots in Freiberger Elektronikwerkstoffe GmbH (FEW) which was privatized in 1995. After FEW had taken over the gallium arsenide activity of Wacker Chemitronic GmbH in 1990, under the supervision of the Treuhandanstalt, the production of GaAs was established and further developed using Freiberger's own technology. In January 1997, Siemens AG, one of Freiberger's key customers, acquired a 12.5% share in the company.

Freiberger expects continuing rapid growth in demand for its products and is currently preparing an additional investment programmme of $9.3 million (DM16 million) that will provide a further 45 jobs. In 1996, Freiberger had revenues of $13.7 million (DM 23.4 million), which it expects to increase 20% to $16.4 million (DM28 million) in 1997.

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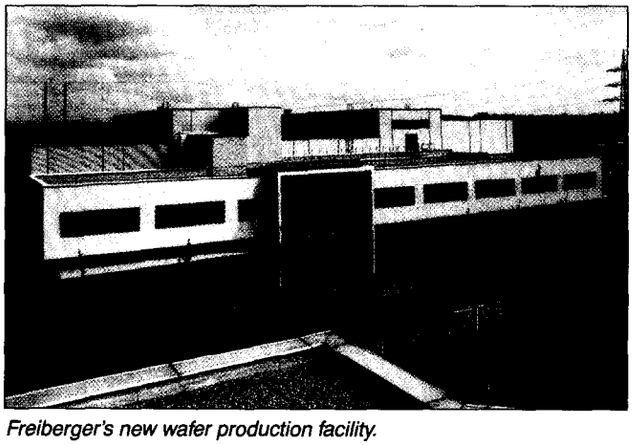

Freiberger's new wafer production facility.